Certificate in Field Epidemiology

The Certificate in Field Epidemiology is a 12-credit hour program of online course developed by the School of Public Health at the University of North Carolina at Chapel Hill. The curriculum addresses the core functions of outbreak investigation; surveillance systems and methods; infectious disease epidemiology; field epidemiology methods. Students will be able to register, receive materials, interact with faculty, order books, and does not require travel to the campus. There is a cost for this course.
http://www.sph.unc.edu/nciph/fieldepi/

Essentials of Probability and Statistical Inference IV-Algorithmic and Non-parametric Approaches

Developed at the Johns Hopkins Bloomberg School of Public Health, this self-study course introduces the theory and application of modern, computationally-based methods for exploring and drawing inferences from data. Covers re-sampling methods, non-parametric regression, prediction, dimension reduction and clustering. Specific topics include Monte Carlo simulation, bootstrap cross-validation, splines, local weighted regression, CART, random forests, neural networks, support vector machines, and hierarchical clustering. De-emphasizes proofs and replaces them with extended discussion of interpretation of results and simulation and data analysis for illustration.
http://ocw.jhsph.edu/courses/EssentialsProbabilityStatisticalInference/

Healthcare Database Course

Developed by George Mason University, this course introduces students to the design of health and medical databases and provides hands-on experience with using such databases. It explores uses of medical record systems and includes review and analysis of databases and database management systems. It also examines application of databases to clinical and managerial transaction.
http://gunston.gmu.edu/healthscience/709/Default.asp

Health Data Integration Course

Developed by George Mason University, this course teaches students to manipulate large databases. Students learn to create link table queries; write SQL application programs; understand sources of data conflicts; identify methods of integrating ODBC databases with legacy data; learn concepts of data warehousing; and learn methods of analysis of large databases, including Bayesian belief networks and machine learning in the health care context.
http://gunston.gmu.edu/healthscience/720/default.asp

Measuring Health Disparities

Developed by the Michigan Public Health Training Center, this two-part course is available in CD Rom/Downloadable computer file (PC compatible) formats. The course focuses on how to understand and define health disparities, how to measure health disparities, including some of the common issues faced when doing so and the advantages and disadvantages of health disparity measures. The course discusses how

best to use different measures to communicate and evaluate health disparity in different communities.
https://practice.sph.umich.edu/mphtc/site.php?module=courses_one_online_course&id=247

Methods in Biostatistics I and Methods in Biostatistics II

Developed at the Johns Hopkins Bloomberg School of Public Health, this self-study course helps develop fundamental concepts in applied probability, exploratory data analysis, and statistical inference. They focus on probability and analysis of one and two samples. The topics covered in these courses include: discrete and continuous probability models; expectation and variance; central limit theorem; inference, including hypothesis testing and confidence for means; maximum likelihood estimation; sample size determinations; elementary non-parametric methods; graphical displays; and data transformations.
Link for Methods in Biostatistics I:
http://ocw.jhsph.edu/courses/MethodsInBiostatisticsI/
Link for Methods in Biostatistics II:
http://ocw.jhsph.edu/courses/methodsinbiostatisticsii/

Statistical Reasoning in Public Health I

Developed by John McGready, Johns Hopkins Bloomberg School of Public Health, this online self-study course, introduces selected topics in biostatistical concepts and reasoning through pdf version of slides used during lectures, exercises, and bulletin board discussions. It represents an introduction to the field and provides a survey of data and data types. Specific topics include tools for describing central tendency and variability in data; methods for performing inference on population means and proportions via sample data; statistical hypothesis testing and its application to group comparisons; issues of power and sample size in study designs; and random sample and other study types.
http://ocw.jhsph.edu/courses/StatisticalReasoning1/

Statistical Reasoning in Public Health II

The course builds on the material in Statistical Reasoning in Public Health I , extending the statistical procedures discussed in that course to the multivariate realm, via multiple regression methods. New topics, such as methods for clinical diagnostic testing, and univariate, bivariate, and multivariate techniques for survival analysis will also be covered. These topics will be reinforced with many "real-life" examples drawn from recent biomedical literature.
http://ocw.jhsph.edu/courses/StatisticalReasoning2/

Presenting Data

Organizing data in tables and charts: Criteria for effective presentation

Part of the Supercourse, and developed at the University of Pittsburgh / Rutgers University, the course acknowledges that researchers must organize data in tables and charts for a variety of reasons, ranging from presenting results for a statistical analysis, to describing trends or differences across groups, to reporting health data from public use

data sets for other researchers to use in their own analysis. This tutorial describes a set of principles for effectively organizing data to suit the particular task at hand.

Writing

Proposal Writing

Developed by the Foundation Center, the short course is free, while the comprehensive course is available for $ 189.95 for 12 months of unlimited online access. The courses include sections on: Introduction and Course; Components of Proposals; Executive Summary; The Statement of Need; Project Description; The Budget; Organizational Information; The Proposal's conclusion; Packaging the Proposal; and Other Formats and variations. The Comprehensive Course also includes ten detailed sections, case studies, interactive exercises, and four exams.

Proposal Writing Short Course
http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html

Proposal Writing: The Comprehensive Course
http://foundationcenter.org/marketplace/catalog/product_online_training.jhtml?id=prod1150001